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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/712,257 | 11/14/2003 | Lothar Zipfel | 037110.52632US | 8056 |

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| EXAMINER |
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COONEY, JOHN M

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| ART UNIT | PAPER NUMBER |
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1711

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,257

Applicant(s)

ZIPFEL ET AL.

Examiner

John m. Cooney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-9-05 has been entered.

The following rejection are set forth or maintained as new herein:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims are confusing as to intent because it can not be determined what component(s) the % by weight value ranges are based upon. Applicants' recite no basis for the ranges of weight % values for their blowing agent component and their phosphorus compound component, and it can not be determined if the basis for the ranges of values are on the polyol component or the premix as a whole.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 198 22 944 (equiv. to U.S. 6,380,275).

DE-198 22 944 discloses polyol premixes for the preparation of foamed products wherein teaching of polyol premixes containing polyol, the blowing agents as claimed, phosphorus flame retardants as claimed, and assistants/additives as claimed are combined in a manner and in amounts which read on the instant claims. (see the entire document).

DE-198 22 944 differs from applicants' claims in that it does not particularly recite the ranges of amount values claimed by applicants' for their combinations of blowing agents. However, the reference does teach ranges of amount values in overlap with the ranges of values of applicants' claims. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied the amounts of blowing agents within the teachings of DE-198 22 944 for the purpose of imparting their foaming effect in the premixes of DE-198 22 944 in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being obvious over Kruecke et al. (6,080,799) & (6,380,275), each taken alone & jointly referred to as KRUECK et al.

The applied references have a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2)..

KRUECKE et al. disclose preparations reading on polyol premixes of polyol, the blowing agents as claimed, flame retardants as claimed, and assistants/additives as claimed which are combined in a manner and in amounts which read on the instant claims. (For 6,080,799 see column 2 line 3 – column 4 line 27, as well as the entire

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document & For 6,380,275 see column 1 line 53 – column 4 line 56, as well as, the entire document).

KRUECKE et al. differ from applicants' claims in that it does not particularly recite the ranges of amount values claimed by applicants' for their combinations of blowing agents. However, the KRUECKE et al. do teach ranges of amount values in overlap with the ranges of values of applicants' claims. Accordingly, it would have been obvious for one having ordinary skill in the art to have varied the amounts of blowing agents within the teachings of KRUECKE et al. for the purpose of imparting their foaming effect in the premixes of KRUECKE et al. in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,380,275.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositions claimed differ in amounts of materials employed such that it would have been obvious to one having ordinary skill in the art to have varied their amounts for the purpose of controlling their additive effects and function, and the premixes would have been obvious developments from the claimed methods and compositions claimed. Claim 8 of 6,380,275 discloses flame retardants but does not require the phosphorus agents of applicants' claims. However, looking to the supporting disclosure for its teaching effect discloses the employment of these materials for their additive function. Accordingly, it would have been obvious to one having ordinary skill in the art to have imparted their employment in the preparations of 6,380,275 for purposes of imparting their additive effect and to have varied their amounts for the purpose of controlling their additive effects and function in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claims 1-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,080,799 in view of Hinz et al.(5,552,450).

The claims of 6,080,799 disclose blowing agent compositions and methods of use in foam forming applications. The compositions claimed differ in amounts of

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materials employed such that it would have been obvious to one having ordinary skill in the art to have varied their amounts for the purpose of controlling their additive effects and function, and the premixes would have been obvious developments from the claimed methods and compositions claimed. Claims of 6,080,799 differ in that phosphorus additives are not required. However, Hinz et al. discloses phosphorus agents of applicants' claims as flameproofing agents in urethane applications (column 10 lines 11-16). Accordingly, it would have been obvious to one having ordinary skill in the art to have employed the flameproofing agents of Hinz et al. in the preparations of 6,080,799 for purposes of imparting their additive effect and to have varied their amounts for the purpose of controlling their additive effects and function in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/901,430. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositions claimed differ in amounts of materials employed such that it would have been obvious to one having ordinary skill in the art to have varied their amounts for the purpose of controlling their additive effects and function. Claim 5 of 10/901,430 discloses flameproofing agents but does not require the phosphorus agents of applicants' claims. However, looking to the supporting disclosure for its teaching effect discloses the employment of these materials

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for their additive function. Accordingly, it would have been obvious to one having ordinary skill in the art to have imparted their employment in the preparations of 10/901,430 for purposes of imparting their additive effect and to have varied their amounts for the purpose of controlling their additive effects and function in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/207,824 in view of Hinz et al.

The claims of 10/207,824 disclose blowing agent compositions and methods of use in foam forming applications. The compositions claimed differ in amounts of materials employed such that it would have been obvious to one having ordinary skill in the art to have varied their amounts for the purpose of controlling their additive effects and function. Claims of 10/207,824 differ in that phosphorus additives are not required. However, Hinz et al. discloses phosphorus agents of applicants' claims as flameproofing agents in urethane applications (column 10 lines 11-16). Accordingly, it would have been obvious to one having ordinary skill in the art to have employed the flameproofing agents of Hinz et al. in the preparations of 10/207,824 for purposes of

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imparting their additive effect and to have varied their amounts for the purpose of controlling their additive effects and function in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

This is a provisional obviousness-type double patenting rejection.

Comments on reply

Applicants' arguments have been considered but rejections are maintained as set forth above in light of applicants' amendments.

The points made previously still apply at this time:

Applicants' recitation of "non-combustibility" in the preamble is noted. However, distinction must be attributable to features supported by materials and limitations recited in the claims. The pointing to a combustible species in the examples of KRUECKE et al. (applicants appear at 5 of their reply to be suggesting that dimethylcyclohexylamine is combustible) does not distinguish the teaching from the instant claims without degrees of combustibility being defined or language in the claims being drafted to exclude such combustible materials. Further, the cited arts' teaching value is not limited to what they set forth in their examples. The fact that combustible elements may be employed in examples of the cited art does not negate the teachings of the totality of the

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references which are not seen to require the presences of the, apparently, combustible species highlighted in applicants' reply.

Additionally, regarding applicants' latest showings:

Applicants' affidavit is unpersuasive as it has not been signed, and any further remarks are made based on the treatment of the affidavit as if it were signed.

Claims Must be Commensurate With Showings:

Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman*, 170 USPQ 340; *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A*, 17 USPQ 2d 1719; accordingly, it has been held that to overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288. See also *In re Kulling*, 14 USPQ 2d 1056.

Applicants' claims are not commensurate in scope with the scope of the showings presented on reply.

The showings of paragraph 11 of applicants' affidavit are directed towards limited amounts which are not commensurate in scope with the scope of their claims.

Table one is directed towards a 97:3 ratio of 1,1,1,3,3-pentafluorobutane(PFB): 1,1,1,2,3,3,3-heptafluoropropane(HFP) which is outside the scope of applicants' claims,

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rather than, perhaps, a ratio of 93:7 of PFB:HFB. How this ratio might be within the scope of the claims has not been clearly presented.

Applicants' showings in Table 1 only present comparisons based on PFB/HFP blends at one data point (currently outside applicants' inventive range), tris-chloroisopropyl phosphate (TCPP) with or without triethyl phosphate (TEP), and a limited class of polyether polyols (non-specified spray polyol #1), and such a showing is not commensurate in scope with the scope of the claims. Though it is noted that the probative value of a narrow range of data can be reasonably extended to prove the unobviousness of a broader claimed range. In re Kollman, 595 F.2d 48, 56 (CCPA 1979). (Holding that the unobviousness of a broader claimed range was proven by a narrower range of data, when one having ordinary skill in the art could ascertain a trend in the exemplified data which would allow him to reasonably extend the probative value thereof.), applicants' have not demonstrated basis for such an extension in the instant case.

Finally, in regard to Table 1, applicants' do not demonstrate the rational used to determine the expected flashpoint values used in their comparisons to elevate these values to more than opinion or assumption.

As to Table 2, it is held that applicants' claims are not commensurate in scope with the scope of the showings presented on reply.

Applicants' showings only present comparisons based on PFB/HFP blends, TCPP, and a limited class of polyether polyols (Tercarol), and such a showing is not commensurate in scope with the scope of the claims.

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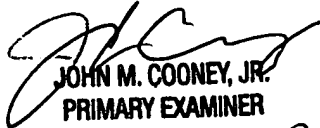
Despite issues of an unsigned declaration, confusion as to the basis of weight values, and lack of correlation between the propellant/polyol(%) values and the ranges of values set forth in the claims, examiner attempts herein to identify allowable subject matter based on the showings as they stand.

Applicants appear to be formulating persuasive demonstration of unexpected results for blends of PFB/HFP in a 93:7 ratio at the lower end of their range of weight % values(for the binary blowing agent){the absence of flashpoint data for the 11.1 & 17.7 samples in Table 2 column 5 are noted, are seen to be required for support of 4-35% range, and are not explained for by applicant}, TCP, and Tercarol polyether polyols. Though the probative value of a narrow range of data can be reasonably extended to prove the unobviousness of a broader claimed range. In re Kollman, 595 F.2d 48, 56 (CCPA 1979){see also cite above}, applicants have not established that one having ordinary skill in the art could ascertain a trend in the exemplified data which would allow him to reasonably extend the probative value thereof to the scope of the claims as they stand. Applicants' have not demonstrated basis for such an extension in the instant case for any of the elements pointed to above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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